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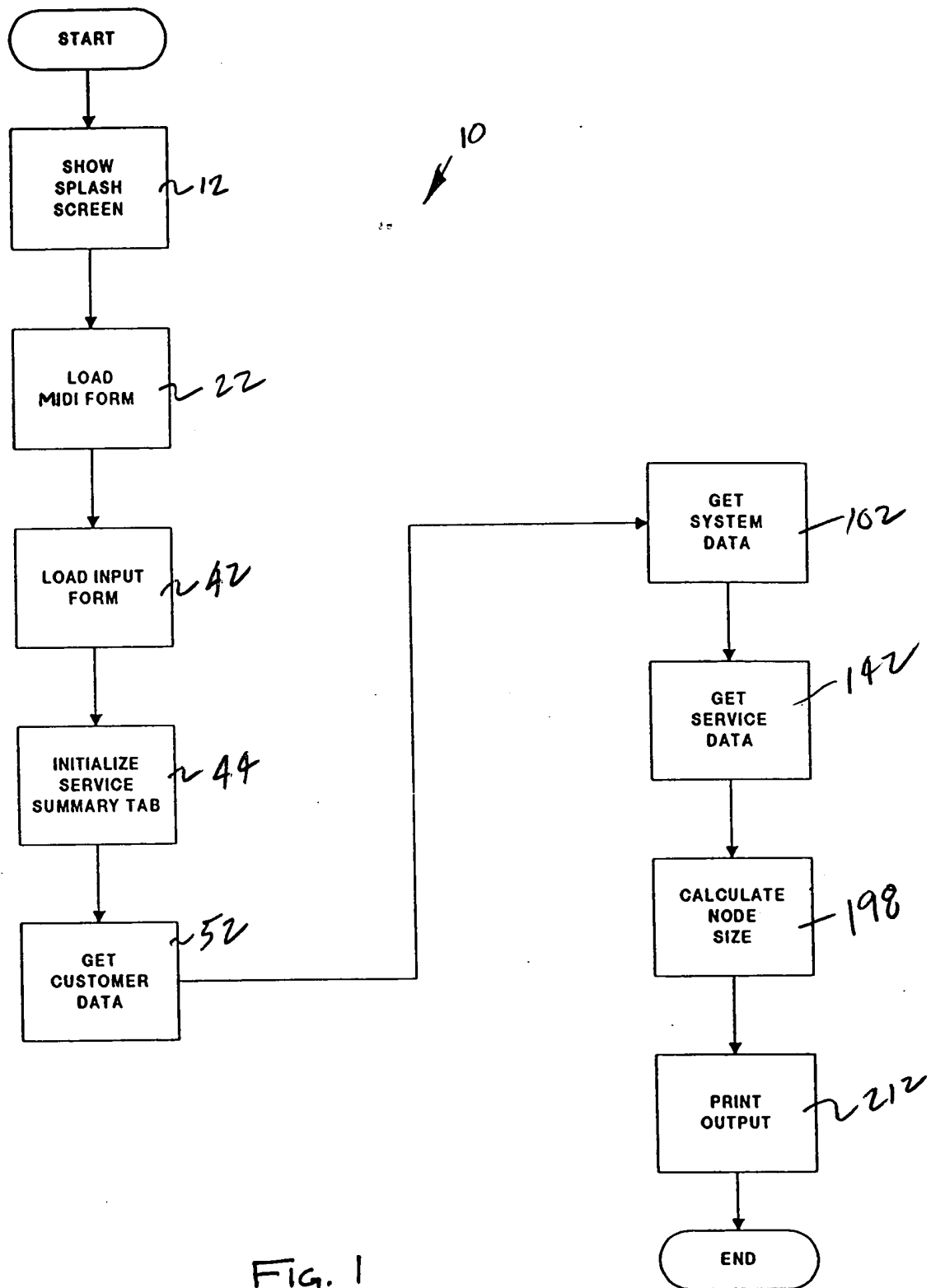


FIG. 1



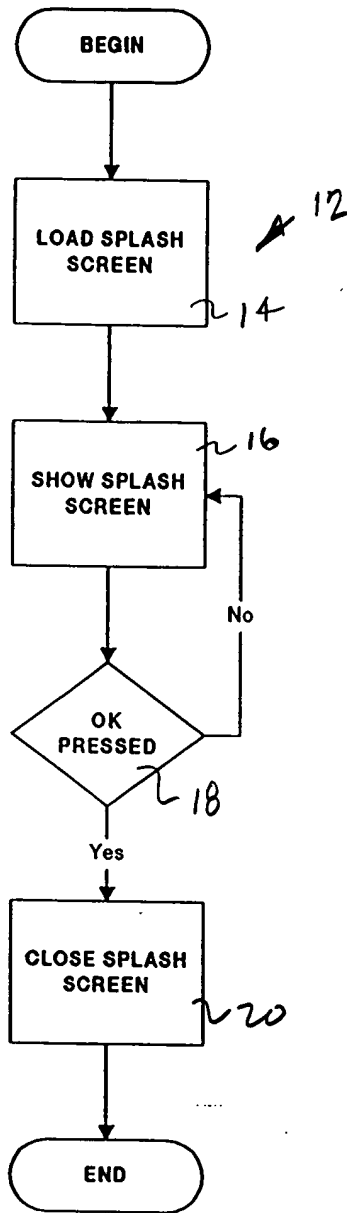


FIG. 2

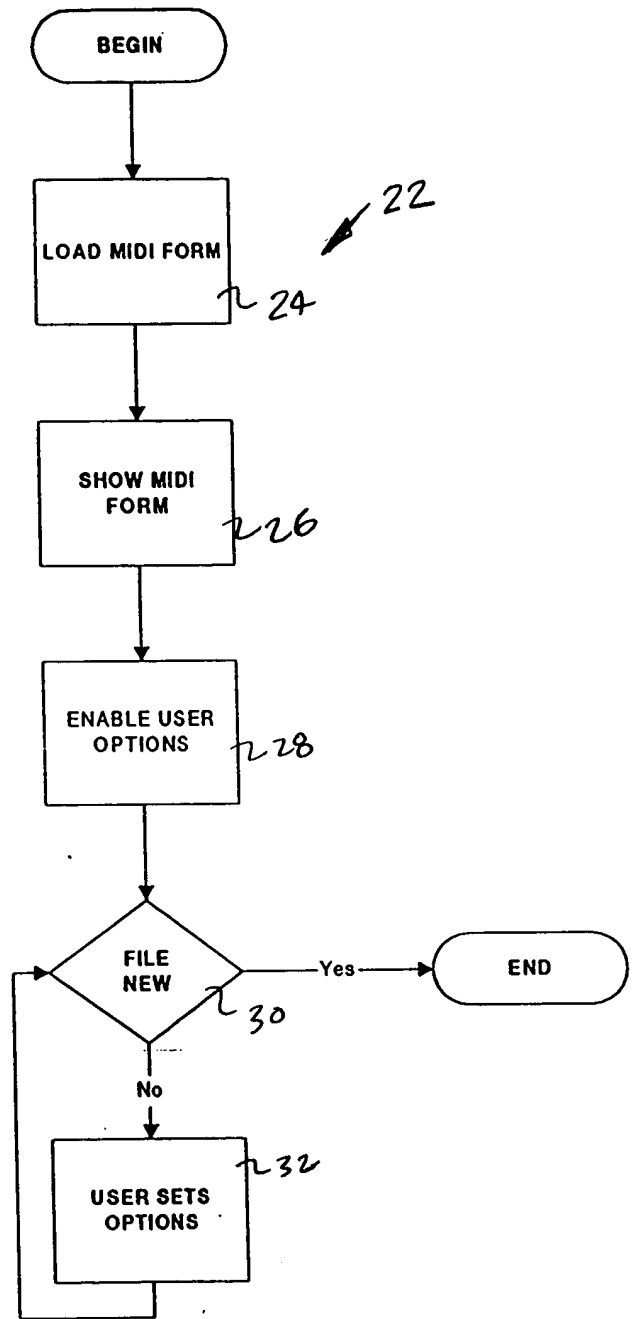


FIG. 3

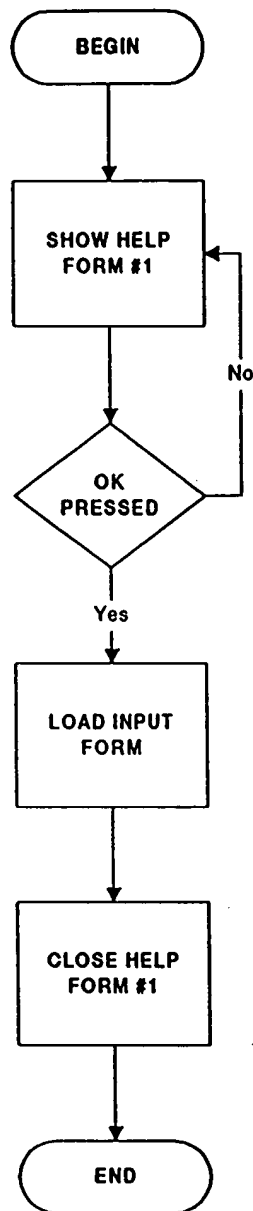


FIG. 4

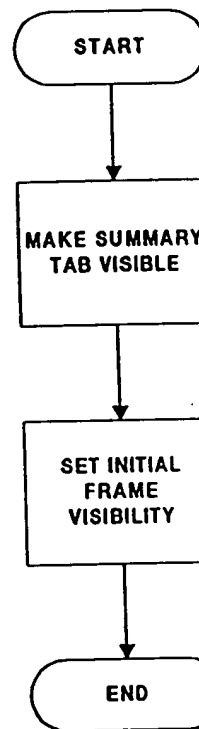


FIG. 5

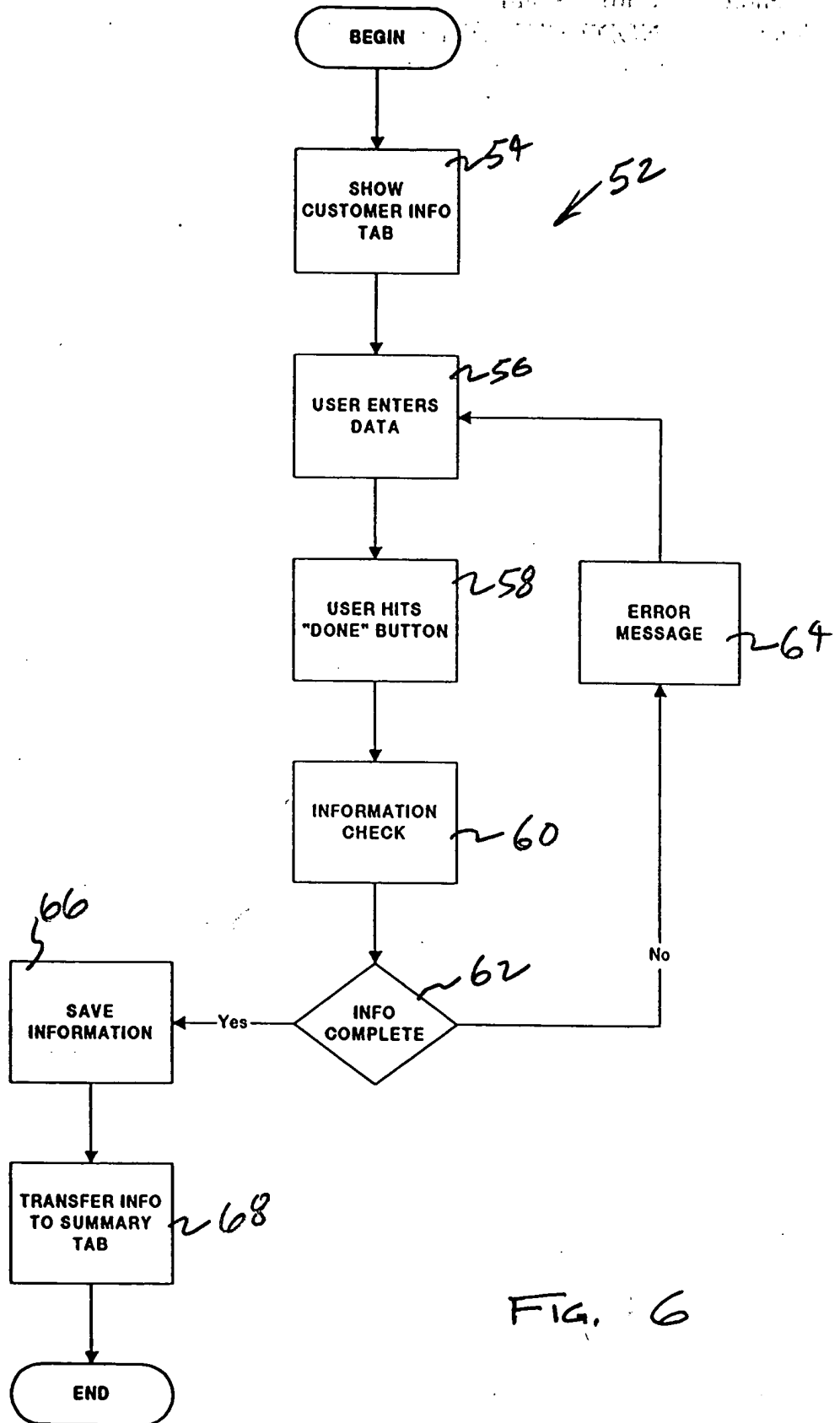
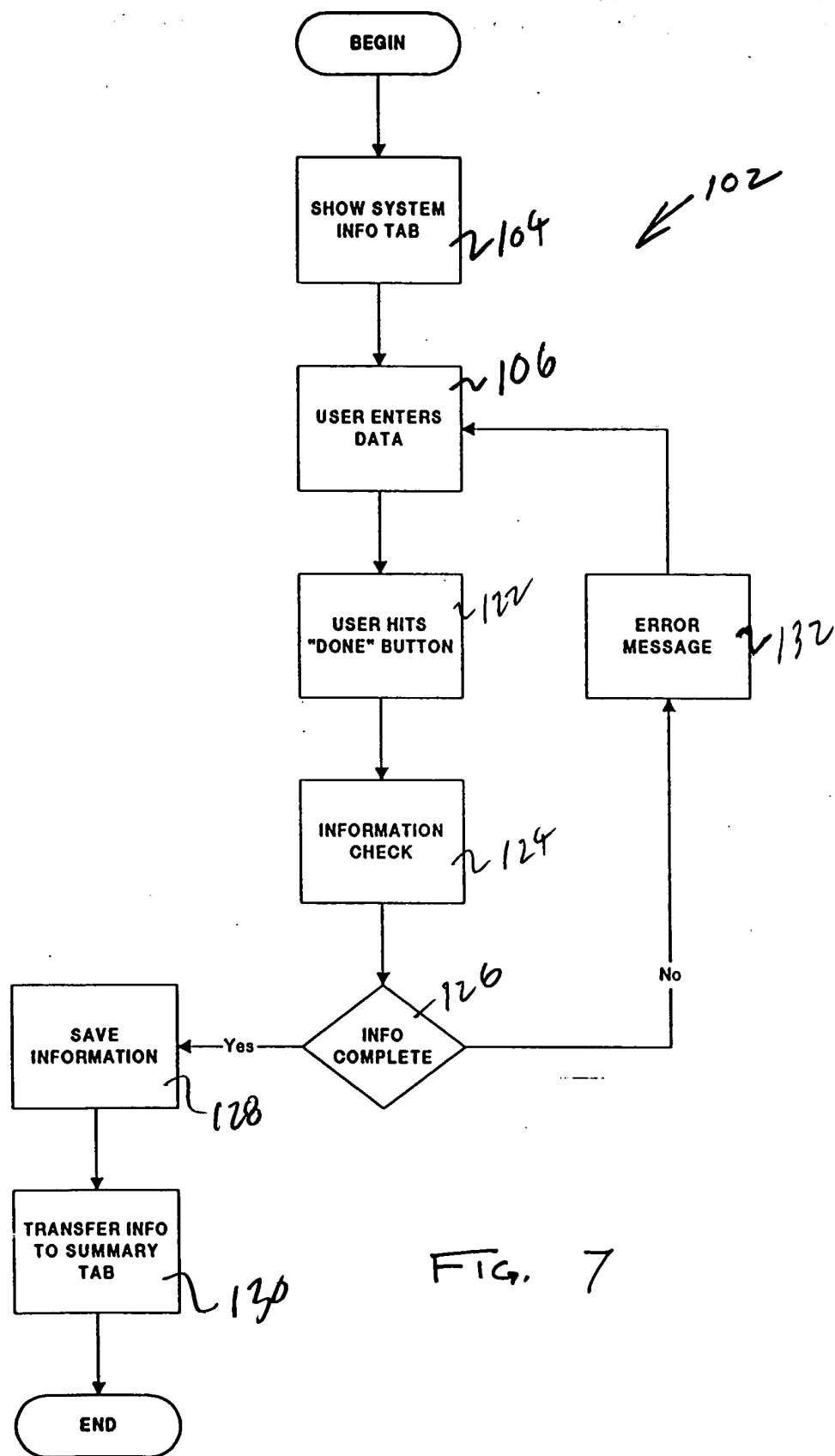


FIG. 6



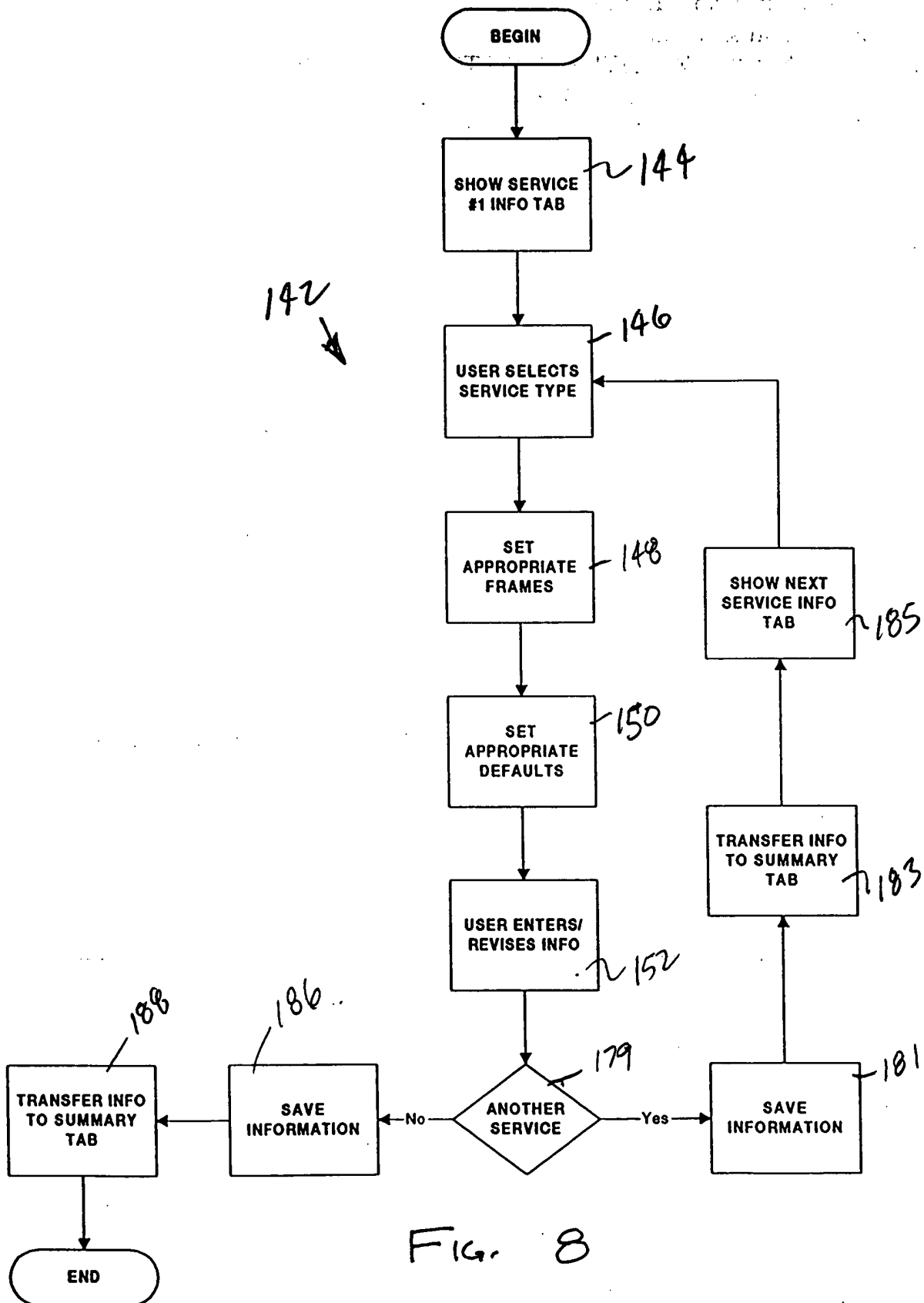




Figure 9

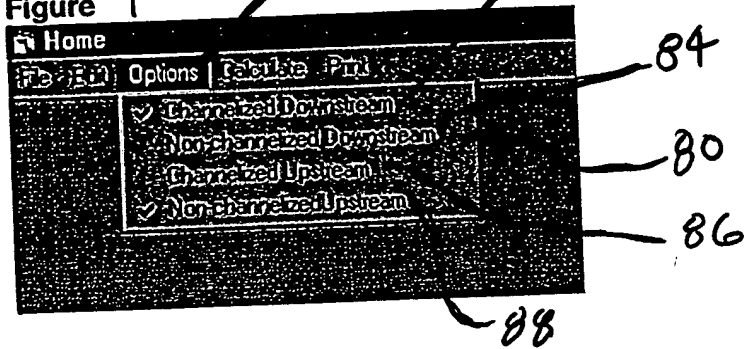


Figure 10

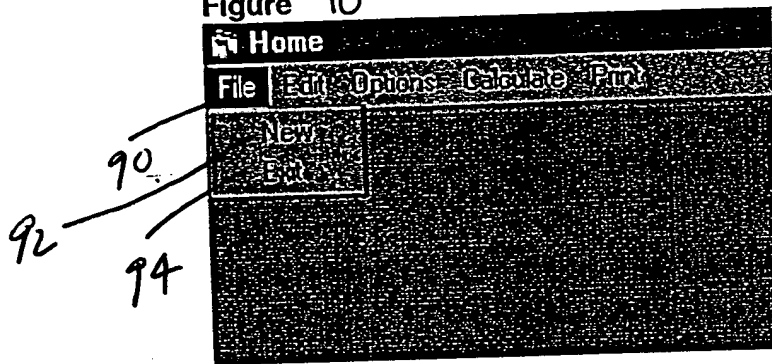


Figure 11

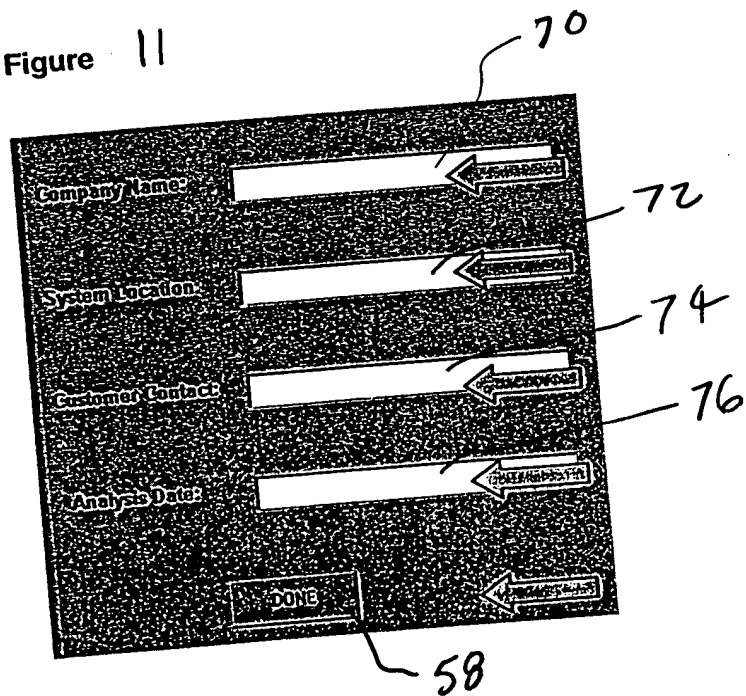


Figure 12

**Analysis Parameters**

Customer Info System Bandwidth

---

**Downstream bandwidth information** Calc. Field

Lower end of the forward or downstream passband  MHz

Upper end of the forward or downstream passband  MHz

**Upstream bandwidth information** Calc. Field

Lower end of the return or upstream passband  MHz

Upper end of the return or upstream passband  MHz

**Node Splitting Information** Input Fields

Number of nodes served per transmitter

Number of nodes return combined

**Special Bandwidth Considerations** Input Fields

Forward bandwidth that will not be usable for services  MHz

Return bandwidth that will not be usable for services  MHz

**Available forward bandwidth for analog/digital/broadcast and interactive services** 1750 MHz

**Available return bandwidth for analog/digital/broadcast and interactive services** 340 MHz

**DONE**

110a

110

110b

112a

112

112b

114

112

114b

114a

116

102

118

120

116a

116b

Figure 13

**Analysis Parameters**

Customer Info | System Bandwidth | Service 1 | Service 2 | Service 3

**Current Recommended Homes Passed per Node**

**Calculating**

**Service Type**

- ☐ Analog Broadband
- ☐ Digital Broadband
- ☐ Packet Access / Portal
- ☐ Cable Modem
- ☐ Telephony
- ☐ Streaming Video
- ☐ Video on Demand

**Downstream Service Info**

Channel Width: 6 MHz

Channel Qty: 1

Bandwidth Required: 6 MHz

**Upstream Service Info**

Channel Width: 1.5 MHz

Channel Qty: 1

Bandwidth Required: 1.5 MHz

**Service Description**

Cable modem data service

**Downstream Data Info**

Downstream Modulation Scheme

- ☐ FSK
- ☐ QPSK
- ☐ 16QAM
- ☐ 64QAM
- ☐ 256QAM
- ☐ Other: 0

**Upstream Data Info**

Upstream Modulation Scheme

- ☐ FSK
- ☐ QPSK
- ☐ 16QAM
- ☐ 64QAM
- ☐ 256QAM
- ☐ Other: 0

**Downstream Subscriber Data Rate**

0.256 Mb/s

**Upstream Subscriber Data Rate**

0.128 Mb/s

**Service Penetration Rate**

30 %

**Service Simultaneous Use**

25 %

**Downstream Payload Data Rate per Channel**

27 Mb/s

**Upstream Payload Data Rate per Channel**

2 Mb/s

**Buttons:** Add Service Entry, Calculate Node Size, New Service

146

170  
172

178

142  
190

168

166

176

174

175

160

162

164

154a

154

154b

154c

158

156

156c

Figure 14

**CHANNEL SPACING**

Enter standard downstream channel spacing (MHz)

OK

Cancel

E

Figure 15

**Service Summary**

Current Recommended Homes Passed per Node: 4546

Upstream Limited

Fwd Bandwidth Available (MHz): 680

Ret Bandwidth Available (MHz): 35

Service Name	% Service Penetration	% of Simult. Use	% of Subscribers	Fwd Bandwidth Required (MHz)	Ret Bandwidth Required (MHz)
Analog Broadcast Channels	65	100	2954	462	0
Cable modem data service	30	25	1363	72.056	34.1
Polled Status Monitoring	0	100	0	0.3	0.3

Figure 16

**Home**

File Edit Options Calculate Print

Individual Services